ATTACHMENT B

Curriculum Vitae

Name Bing Ren

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Nationality People's Republic of China
Permanent resident of U.S.A.

Birth date April 2, 1969

Degrees

B.S. in Biophysics, University of Science and Technology of China, 1991

M.S. in Computer Science, Harvard University, 1998

Ph.D. in Biochemistry, Harvard University, 1998
Thesis topic, "Mechanisms of Transcriptional Repression in Eukaryotic Cells"

Awards

Distinguished Young Investigator Award, Chinese Biological Investigators Society (2007)

The Charlotte Geyer Foundation Award (2004)

Sidney Kimmel Scholar Award (2002)

Helen Hay Whitney Foundation postdoctoral fellowship (1999 – 2001)

Harvard Certificate of Distinction in Teaching, Harvard University (1997)

Paul Mazur Fellowship in Experimental Biology, Harvard University (1994)

Scholarships, University of Science & Technology of China (1987-1991)

Positions Held

7/2009- present	Member Ludwig Institute for Cancer Research, San Diego Branch
7/2009- present	Professor Department of Cellular and Molecular Medicine UCSD School of Medicine
7/2007- 6/2009	Associate Member

		Ludwig Institute for Cancer Research, San Diego Branch
	7/2007- 6/2009	Associate Professor Department of Cellular and Molecular Medicine UCSD School of Medicine
	10/2001- 6/2007	Assistant Member Ludwig Institute for Cancer Research, San Diego Branch
	10/2001- 6/2007	Assistant Professor Dept. of Cellular and Molecular Medicine UCSD School of Medicine
	10/1998 – 9/2001	Postdoctoral Fellow in laboratory of Dr. Richard A. Young at the Whitehead Institute for Biomedical Research
	6/1993 – 9/1998	Graduate student in laboratory of Dr. Tom Maniatis in Department of Molecular and Cellular biology at Harvard University
University Service	2001-present	UCSD Moores Cancer Center, Cancer Biology Program
	2002- 2004	BMS Graduate Program Minor Proposition Committee
	2002.12	UCSD Cancer Center Seed Monie review committee
	2003-2005	Admission Committee for graduate students in the Biomedical Science program, UCSD School of Medicine
	2003.6	UCSD Cancer Center Intramural Grant Review Committee
	2004- present	MSTP Admission Committee, UCSD School of medicine
	2006.12	UCSD Cancer Center Intramural Grant Review Committee
	2007 – 2008	Faculty Search Committee, Reproductive Biology
	2007 – 2009	Faculty Search Committee, Molecular Genetic Chief
	2007 – 2008	Faculty Search Committee, Bioinformatics
	2007 – present	UCSD, Committee of Nomination
	2007 – 2009	Design Team of Research Cyber-Infrastructure
	2008 – present	Member, UCSD SOM Research Council

2007 - present	Admission Committee for UCSD Bioinformatics Graduate Program

Professional Service

2002- 2004	National Research Council "Committee on emerging issues and data on environmental contaminants"
2006 – present	Editorial Board, Wiley Interdisciplinary Reviews (WIRES): Systems Biology
2007	Co-organizer, 5th Cold Spring Harbor Laboratory Conference on Systems Biology
2008	Co-organizer, 6th Cold Spring Harbor Laboratory Conference on Systems Biology
2008 – present	Member of External Advisory Board of University of South California Epigenome Center
2007 – present	Member, Faculty of 1000 Biology/Genomics and Gene expression Section

Academic Membership

1997 – present	Member, American Association for the Advancement of Science
2006 – present	Member, American Society of Human Genetics
2007 - present	Member, Chinese Biological Investigator Society
2009 – present	Member, American Association of Cancer Research

Grant Reviews

The Innovative Molecular Analysis Technology panel (IMAT), NCI	2004
Cancer Genome Characterization Centers, NCI	2006
Reviewer, Welcome Trust Career Development Award	2006
Reviewer, Strategic Initiative in Life Sciences, The Argonne National Laboratory	2006
Reviewer, W. M. Keck Foundation Medical Research Grant	2006
Reviewer, National Science Foundation Grant	2006

Reviewer, ACS Molecular Genetic section	2008
Ad hoc member, NIH Study Section GCAT	2008
Ad hoc member, NIH CEGS Study Section	2008
Member, NIH Special Emphasis Panel on "Technology Development in Epigenetics"	2008
Ad hoc meber, Genes, Genomics, Genetics Fellowship Study Section, NIH	2009
Member, NCI Special Emphasis Panel on TCGA centers	2009
Member, NIH Study Section GCAT	2009

Research Funding

San Diego Epigenome Center (1U01ES017166)	09/2008 - 06/2013	$16,640,738 total
Genome-wide map of active promoters in the mouse cells (1R01HG003991)	09/2008 – 06/2011	$1,720,621 total
Mechanisms of chromatin dynamics at enhancers during ES cell differentiation (RN2-00905-1)	12/2008 – 08/2013	$1,700,000 total
Computational Modeling of Mammalian Promoters (R01 HG001696)	05/2008 – 02/2011	$60,643 direct annually
California Institute of Regenerative Medicine Leon Thal SEED grant (PI: Ren)	02/1/2008 – 01/31/2010	$653,823 total
NIH/NHGRI /U01 HG003151 (PI: Ren) "Mapping transcriptional regulator elements in human DNA"	08/1/2006 – 09/31/2008	Estimated Total $632,399 direct
NIH/NHGRI/U01 HG004264-01 (PI: K. White) "A Cis Regulatory map of the Drosophila Genome"	5/01/2007- 4/30/2011	Estimated Total $600,000
NIH/NCI / 4R33CA105829 (PI: Ren) "Transcription Factor Target Mapping in Mammalian Genome"	08/16/2005 – 07/31/2008	Total $591,000 direct
NIH/NHGRI /U01 HG003151 (PI: Ren) "Mapping transcriptional regulator elements in human DNA"	09/30/2003 – 07/31/2006	Total $2,185,348 direct
NIH/NHGRI/R01 HG003119-01 (PI: Fu) "A novel ChIP-on-Chip Technology for ENCODE"	10/01/2003 – 09/30/2006	Subtotal $84,444 direct

NIH/NCI /1R21CA105829-01 (PI: Ren) "Transcription Factor Target Mapping in Mammalian Genome"	08/16/2004 – 07/31/2005	Total $100,000 direct
Charlotte Geyer Foundation Award (PI: Ren) "Transcription Factor Target Mapping in Mammalian Genome"	1/1/2004 – 08/15/2004	Total $85,000
Kimmel Scholar Award (PI: Ren) "Mechanisms of human tumorigenesis by c-myc: identification of direct transcriptional targets"	08/01/2002 – 07/31/2004	Total $200,000
W.M. Keck Foundation (PI: Ren) No specific project	08/01/2003 – 07/31/2004	Total: $10,000
ACS/IRG 70-002 (PI: Ren) "A general method to identify in vivo target genes for mouse transcription factors"	08/01/2002 – 07/31/2003	Total $20,000
Ludwig Institute General Support (PI: Ren)	Since 2001	

Teaching

2002-2006	BIOM211, Molecular Biology for graduate students (3 hours of lecture time each year)
2003-2006	CBB: Cellular Biochemistry and Biology Reading group for medical students (18 hours each year)
2002-2006	ME260: Modern Techniques of Biomedical Research for graduate students (2 hours each year)
2003-2005	Systems Biology for graduate students (3 hours each year)
2005-2006	BGGN220: Biology graduate core course (2 hours of lecture time each year)
2004-2006	Path 221: Molecular Pathology of Cancer (2 hours of lecture time each year)
2006 - 2008	CBMD, Cellular and Molecular Basis of Diseases (2 two-hour lectures each year)
2006 - now	BIOM 254-2, Molecular and Cell Biology Track Core Course on Transcription and Epigenetics (I give two 90-min lectures each week for nine weeks)
2006- now	BIOM200A/B: Molecular and Cellular Biology Core Course, module director (I give three two-hour lectures for this course)

Graduate students supervised

Nate Heintzman	2002 – 2007	Biodiscovery Fellow at UCSD
Nate Maynard	2002 – 2008	Postdoc in Stanford U.
Leah O. Barrera	2003 – 2007	Scientist, Ambit Biosciences
Saurabh Agarwal	2005 – present	

Gary Hon	2006 – 2009	Postdoc in LICR
Nisha Rajagopal	2009 - present	
Chloe Rivera	2009 - present	

Postdoctoral fellows supervised

Zirong Li	2002 – 2007	Scientist at Millipore
Tae Hoon Kim	2002 – 2006	Assistant Professor at Yale University
Kun Wang	2003 – 2005	Currently practicing law
David Hawkins	2005 – present	
Andrea Smallwood	2007 – present	
Fulai Jin	2007 – present	
Celso Espionoza	2007 – present	
Feng Yue	2008 – present	
Haruhiko Ishii	2008 – 2009	Project Scientist at UCSD
Yin Shen	2008 – present	
Tingting Du	2008 – present	
Yan Li	2009 – present	
Gary Hon	2009 – present	

Invited presentations

2001 Cold Spring Harbor Computational Biology Symposium, Long Island, NY, September 2001.

National Institute of Environmental Health and Sciences Symposium, Bethesda, Maryland, December 2001

2002 Gordon Research Conference on Hormonal Regulation, Vermont, July 2002

South California Biotechnology Symposium, Irvine, CA, October 2002

2003 Ray Wu Society meeting, San Diego, January 2003

Institute of Theoretical Physics meeting on computation biology, Santa Barbara, February 2003

Cold Spring Harbor Systems Biology Symposium, Long Island, NY, March 2003

University of California, Los Angeles, Department of Human Genetics, April 2003

University of California, Riverside, Department of Biochemistry, November 2003

2004 University of California, Davis, Comprehensive Cancer Center, February 19, 2004.

ReCOMB Satellite workshop on "Regulatory Genomics", San Diego, CA, March 26-27, 2004

Keystone Symposium on "Biological Discovery Using Diverse High-through Put Data", Steamboat Springs, Colorado, March 30-April 4, 2004

Rockefeller University, October 27, 2004.

54th Annual meeting of society of human genetics, Toronto, Canada, October 26-30, 2004.

2005 International workshop on Encoding information, Okinawa, Japan, February 21-27, 2005.

University of Michigan, Ann Arbor, Bioinformatics Program, March 30.

Keystone Symposium on "Biolipids, lipidomics and their targets" and "PPAR/LXR", Whistler, British Columbia, CA, April 12-17, 2005.

University of California, Riverside, Program of Genetics, Genomics and Bioinformatics, April 18, 2005.

National Cancer Institute, Integrative Systems Biology Working group seminar series. Bethedat, Mariland. July 20th, 2005.

24th Penn State Summer Symposium on molecular biology – Comparative and Functional Genomics. State College, PA. July 20-23, 2005

64th Annual Meeting of Society of Developmental Biology. San Francisco, CA. July 27-31, 2005.

University of California, Irvine, Department of Biological Chemistry and Cancer Research Institute Seminar series. September 16th, 2005

Emory University, Department of Human Genetics seminar series. October 17th, 2005

Institute of Systems Biology. October 28th, 2005

Michigan State University, Department of Biochemistry and Molecular Biology. November 13th, 2005

NCI Workshop on "Defining the Epigenome", Rockville, November 28-29, 2005

Albert Einstein College of Medicine, Department of Developmental and Molecular Biology. December 13, 2005

2006 Morehouse School of Medicine, February 7th, 2006

Cold Spring Harbor Systems Biology Symposium, Long Island, NY, March 23-26, 2006

Wellcome Trust Advanced Courses on Microarray, Hinxton, UK, April 10, 2006

Keystone Symposium on Transcription and Chromatin, Tao, New Mexico, April 21-26, 2006

Integrative Cancer Biology Program (ICBP) Principle Investigator meeting, Nashville, TN, May 1st, 2006

UCSD Cancer Center Luncheon Talk series, UCSD, May 3rd, 2006

Case Western Reserve University, Department of Genetics, Cleveland, Ohio, June 14, 2006

20th IUBMB Congress in Kyoto, Japan, June 18-23, 2006

RIKEN Genomic Sciences Center, Yokohama, Japan, June 18, 2006

Tokyo University, Tokyo, Japan, June 18, 2006

11th SCBA International Symposium, San Francisco, CA, July 19-23, 2006

FASEB Summer Research Conference on "Transcriptional Regulation During Cell Growth, Differentiation, and Development", Vermont Academy, Saxtons River VT, August 12-16, 2006

City of Hope, Los Angeles, CA, August 30, 2006

"Lausanne Genomics Days" conference, Lausanne, Switzerland, Oct. 5-6, 2006

Pathways, Networks and Systems Conference in Mykonos, Greece, Oct. 8-13, 2006

University of Connecticut, Department of genetics and developmental biology, Nov. 2, 2006

Australian Health & Medical Research Congress, in Melbourne, Australia, Nov. 26 – Dec.1 2006

RECOMB Satellite conference on Systems Biology, San Diego, Dec 1-3, 2006

2007 Symposium on Systems Biology/Molecular Networks, Institut de recherches cliniques de Montreal (IRCM), Montreal, Canada, March 12-13, 2007

Roadmap 1.5 epigenetic workshop, NIH, Bethesda, March 19, 2007

Invited Speaker, The Second Cistrome meeting, Harvard Medical School, May 31st, 2007

Invited speaker, Symposium on "Frontiers in Biological Sciences", Beijing, July 22, 2007

Gordon Research Conference on Epigenetic, Plymouth, New Hampshire, August 5-10, 2007

Invited seminar speaker, University of Wisconsin at Madison, Genome Center, September 05, 2007

Invited seminar speaker, University of Southern California, Keck School of Medicine, September 23, 2007

Workshop "Mechanistic and integrative aspects of mRNA synthesis", Baeza, Spain, October 1-3, 2007

Invited seminar speaker, University of Washington, Seattle, Department of Genome Sciences, October 17, 2007

Invited seminar speaker, Washington State University, School of Molecular Biosciences, October 18, 2007

2008 Invited speaker, Symposium on "Systems to Synthesis", Salk Institute, La Jolla, CA. January 15th, 2008.

Invited seminar Speaker, Joint Seminars in Molecular Biology Program of University of California, Davis. January 17th, 2008.

Invited speaker and session chair, The Keystone Conference on "Regulatory Mechanisms in Eukaryotic Transcription", Keystone, CO. February 3rd – 8th, 2008.

Invited seminar speaker, The Molecular and Human Genetics Seminar Series, Baylor College of Medicine, Houston, TX. February 26th, 2008.

Invited seminar speaker, Genetics Seminar Series, Texas A&M University, College Station, TX. February 28th, 2008.

Invited seminar speaker, Biochemistry Seminar Series, University of Colorado, Boulder, March 12, 2008.

Invited seminar speaker, NIDDK, NIH, Bethesda, MA, April 24, 2008

Invited seminar speaker, University of South Florida, Tampa, FL, April 25, 2008

Invited seminar speaker, University of Massachusetts Medical School, Worcester, May 14, 2008

Invited speaker, CAS International Symposium on Developmental Systems Biology. Beijing, China, May 18-20, 2008

Invited seminar speaker, UCLA Department of Biochemistry, Los Angeles, CA, June 5, 2008

Invited speaker, FESAB Summer Conference on "Transcriptional Regulation During Cell Growth, Differentiation, and Development", June 22-27, 2008

Invited speaker, NIA Workshop on "Epigenetics and Aging", Bethesda, MA, July 14-15, 2008

Invited speaker, The 18th Annual BioCity Symposium on "Genes, Chromatin and Disease", BioCity, Turku, Finland, August 14-15, 2008

Invited speaker, Nature Genetics/Wellcome Trust Conference on "Genomics of Common Human Diseases", Boston, MA, September 6-9, 2008

Invited seminar speaker, Frontiers in Bioinformatics and Systems Biology Colloquium, UCSD, San Diego, CA, October 9, 2008

Invited speaker, RECOMB Regulatory Genomics 2008 Conference, Cambridge, MA, October 31 – November 2, 2008

Invited seminar speaker, Fred Hutchinson Cancer Research Center, Seattle, WA, November 18, 2008

Invited seminar speaker, University of Toronto, Toronto, Canada, December 12, 2008.

2009 Invited seminar speaker, Genomic Institute of Singapore, Singapore, January 6, 2009

Invited seminar speaker, Institute of Genome Sciences and Policy, Duke University, Durham, NC, January 27, 2009

Invited speaker, Second Scripps Genomics for Transplantation Symposium, TSRI, La Jolla, CA, January 30, 2009

Invited speaker, Symposium on "New Frontiers in Ultra High Throughput Biology", UCLA, February 19-20, 2009

Invited seminar speaker, Department of Genetics, Yale University, New Haven, CT, February 24, 2009

Invited speaker, Future of Genomics Medicine II, TSRI, La Jolla, CA, February 27-28, 2009

Invited speaker, Keystone Symposium on Epigenetic Basis of Neurodevelopmental Disorders, Keystone, Colorado, March 6-10, 2009

Invited speaker, Emerging Evidence for Epigenomic Changes in Human Disease, NIH, Bethesda, Maryland, March 15-17, 2009

Invited seminar speaker, Center for Complex Biological Systems, University of California, Irvine, March 19, 2009

Invited speaker, AACR Annual Conference, Denver, Colorado, April 18-22, 2009

Invited seminar speaker, Stowers Institute, April 29, 2009

Invited seminar speaker, Institute of Genomics and Systems Biology, University of Chicago, Chicago, Illinois, May 15, 2009

Invited seminar speaker, Children's Memorial Research Center, Northwestern University Feinberg School of Medicine, Chicago, Illinois, May 16, 2009

Invited speaker, symposium on "Genome Frontiers in Human Health and Diseases", UCSD, June 3, 2009

Invited speaker, Symposium "From Cell Signaling to Medical Systems Biology", BioCity, Turku, June 11-12, 2009

Invited speaker, Keystone Conference on "Deregulation of Transcription in Cancer: Controlling Cell Fate Decisions", Killarney, County Kerry, Ireland, June 21–26, 2009

List of Publications

1. Zhou, Y., Wang, W., **Ren, B**. Shou, T. (1994) Receptive field properties of cat retinal ganglion cells during short-term IOP elevation. *Investigative Ophthalmology & Visual Science*, 35(6):2758-64

2. **Ren, B**. and Maniatis, T. (1998) Regulation of *Drosophila* Adh promoter switching by an initiator-targeted repression mechanism. *EMBO J.* 17(4): 1076-1086,

3. **Ren, B**., Chee, K.J., Kim, T.H. and Maniatis, T. (1999) PRDI-BF1/Blimp-1 repression is mediated by corepressors of the groucho family of proteins. *Genes & Dev.* 13(1): 125-137

4. **Ren, B**., Robert, F., Wyrick, J. W., Aparicio, O., Jennings, E. G., Simon, I., Zeitlinger, J., Schreiber, J., Hannett, N., Kanin, E., Volkert , T. L., Wilson, C., Bell, S. P. and Young, R. A. Genome-wide Location and Function of DNA-associated Proteins. (2000) *Science*, 290: 2306-2309

5. Causton, H.C., **Ren, B**., Koh S.S., Harbison, C.T., Kanin, E., Jennings, E.G., Lee, T.I., True, H.L., Lander, E.S. and Young, R.A. (2001) Remodeling of Yeast Genome Expression in Response to Environmental Change. *Mol. Biol. Cell*, 12(12): 323-337

6. **Ren, B**., Cam, H., Takahashi, Y., Volkert, T., Terragni, J., Young, R.A., and Dynlacht, B.D. (2002). E2F Integrates Cell Cycle Progression with DNA Repair, Replication, and G2/M Checkpoints. *Genes & Development*, 16: 245-256,

7. Lee, T.I., Rinaldi, N.J., Robert, F., Odom, D.T., Bar-Joseph, Z., Gerber, G.K., Hannett, N.M., T. Harbison, C.T., Thompson, C.M., Simon, I., Zeitlinger, J., Jennings, E.G., Murray, H.L., Gordon, D.B., **Ren, B.,**Wyrick, J.J., Tagne, J., Volkert, T.L., Fraenkel, E., David K. Gifford, D., Young, R.A., (2002) Transcriptional Regulatory Networks in Saccharomyces cerevisiae. *Science, 298:799-804,*

8. Li, Z., Van Calcar, S., Qu, C., Cavenee, W. K., Zhang, M., and **Ren, B.** (2003). A Global Regulatory Role for c-myc in Burkitt's Lymphoma Cells, *Proc Natl Acad Sci U S A*; 100:8164-8169.

9. **Ren, B** and Dynlacht, BD. (2004) Use of chromatin immunoprecipitation assays in genome-wide location analysis of mammalian transcription factors. *Methods and Enzymology*, Vol 376. 304-315

10. The ENCODE Project Consortium (2004). The ENCODE (ENCyclopedia Of DNA Elements) Project. Science *306*, 636-640.

11. Kim, T.H., Xiong, H., Zhang, Z.H. and **Ren, B.** (2005). β-catenin activates endothelin-1 in colon cancer cells. *Oncogene*; 24:597-604.

12. Kim, TH, Barrera, LO, Qu, CX, Van Calcar, S, Trinklein, ND, Cooper, SJ, Luna, R, Glass, CK, Rosenfeld, MG, Myers, RM and **Ren, B** (2005). Direct isolation and identification of promoters in the human genome. *Genome Research*; 15:830-839

13. Kim, TH, Barrera, LO, Zheng, M, Qu, C, Singer, MA, Richmand, TA, Wu, Y, Green, RD and **Ren, B.** (2005) A high-resolution map of active promoters in the human genome. *Nature*, 436:876-80

14. Sun, P, Xiong, H, Kim, TH, **Ren, B,** and Zhang Z (2006). Positive inter-regulation between beta-catenin/T cell factor-4 signaling and endothelin-1 signaling potentiates proliferation and survival of prostate cancer cells. *Mol Pharmacol*, 69:520-31

15. Kim, TH and **Ren, B.** (2006) Genome-wide Analysis of Protein-DNA Interactions. *Annual Review of Genomics and Human Genetics*, Vol 7. *in press.*

16. Barrera, LO and **Ren, B.** (2006) The transcriptional regulatory code of eukaryotic cells – Insights from Genome-wide Analysis of Chromatin Organization and Transcription Factor Binding. *Current Opinions of Cell Biology*, Vol 18:1-8

17. Hawkins, RD and **Ren, B.** (2006) Genome-wide Location Analysis: insights on transcriptional regulation. *Human Molecular Genetics*, Vol 15, R1-R7

18. Zheng, M, Barrera, LO, **Ren, B** and Wu, Y (2007) ChIP-chip: data, model, and analysis. *Biometrics*, 63(3):787-96

19. Toyo-oka, K., Bowen T.J., Hirotsune S., Li, Z., Jain, S., Ota, S., Lozach, L.E., Bassett, I.G., Lozach, J., Rosenfeld, M.G., Glass, C.K., Eisenman, R., **Ren, B.,** Hurlin, P. and Wynshaw-Boris, A., (2006) Mnt-deficient mammary glands exhibit impaired involution and tumors with characteristics of Myc overexpression. *Cancer Research*, 66:5565-73

20. Kim TH, **Ren B.** (2006) An all-round view of eukaryotic transcription. Genome Biol. 7:323

21. Heintzman N.D., Stuart R.K., Hon G., Fu Y., Barrera L.O., Van Calcar S., Qu C., Ching K.A., Wang W., Weng Z., Green R.D., Crawford G. and **Ren B.,** (2007) Distinct and predictive chromatin signatures of transcriptional promoters and enhancers in the human genome. Nature Genetics, 39:311-318

22. Kim T.H., Abdullayev Z., Smith A., Ching K.A., Loukinov D., Green R.D., Zhang M.Q., Lobanenkov V., and **Ren B.** (2007) Analysis of the vertebrate insulator protein CTCF binding in the human genome. Cell, 128:1231-1245

23. Heintzman N.D. and **Ren, B.**, (2007) The Gateway to Transcription: Identifying, Characterizing, and Understanding Promoters in the Eukaryotic Genome, Cellular and Molecular Life Sciences, 64:386-400

24. The ENCODE consortium (2007) The ENCODE pilot project: Identification and analysis of functional elements in 1% of the human genome. Nature 447:799-816

25. E. Spiteri, G. Konopka, G. Coppola, J. Bomar, M. Oldham, J. Ou, S. C. Vernes, S. E. Fisher, **B. Ren**, D. H. Geschwind (2007) Identification of the transcriptional targets of FOXP2, a gene linked to speech and language in developing human brain. American J. of Human Genetics, 81:1144-1157

26. Xi H, Shulha HP, Lin JM, Vales TR, Fu Y, Bodine DM, McKay RD, Chenoweth JG, Tesar PJ, Furey TS, **Ren B**, Weng Z, Crawford GE. (2007) Identification and Characterization of Cell Type-Specific and Ubiquitous Chromatin Regulatory Structures in the Human Genome. PLoS Genet. 3(8): e136

27. Barrera LO, Li Z, Smith AD, Zhang MQ, Green RD and **Ren B** (2008) Genome-wide mapping of active promoters in mouse embryonic stem cells and adult organs. Genome Research, 18(1):46-5

28. Maynard, ND, Chen, Stuart, RK, Fan, JB, and **Ren, B**, (2008) Genome-wide Mapping of Allele-specific Protein-DNA Interactions in Human Cells. Nature Methods, 5(4):307-9

29. Bibikova, M, Laurent, LC, **Ren, B**, Loring, JF, and Fan, JB, (2008) Unraveling Epigenetic Regulation in Embryonic Stem Cells. Cell Stem Cell, 2: 123 – 134

30. Johnson DS, Li W, Gordon DB, Bhattacharjee A, Curry B, Ghosh J, Brizuela L, Carroll JS, Brown M, Flicek P, Koch CM, Dunham I, Bieda M, Xu X, Farnham PJ, Kapranov P, Nix DA, Gingeras TR, Zhang X, Holster H, Jiang N, Green RD, Song JS, McCuine SA, Anton E, Nguyen L, Trinklein ND, Ye Z, Ching K, Hawkins D, **Ren B**, Scacheri PC, Rozowsky J, Karpikov A, Euskirchen G, Weissman S, Gerstein M, Snyder M, Yang A, Moqtaderi Z, Hirsch H, Shulha HP, Fu Y, Weng Z, Struhl K, Myers RM, Lieb JD, Liu XS. (2008) Systematic evaluation of variability in ChIP-chip experiments using predefined DNA targets. Genome Res. 18(3):393-403.

31. Li Y, Reddy MA, Miao F, Shanmugam N, Yee JK, Hawkins D, **Ren B**, Natarajan R. (2008) Role of the histone H3 lysine 4 methyltransferase, SET7/9, in the regulation of NF-kappa B dependent inflammatory genes: Relevance to diabetes and inflammation. J Biol Chem. 83(39):26771-81.

32. Hon G, **Ren B**, Wang W (2008) ChromaSig: A Probabilistic Approach to Finding Common Chromatin Signatures in the Human Genome. PLoS Comput Biol 4(10): e1000201. Epub 2008 Oct 17.

33. Won, KJ, Chepelev, I, **Ren, B** and Wang, W. (2008) Prediction of Regulatory Elements in Mammalian Genomes Using Chromatin Signatures. BMC Bioinformatics 9(1):547. 2008 [Epub ahead of print].

34. Heintzman, ND, Hon, GC, Hawkins, RD, Kheradpour, P, Stark, A, Stuart, RK, Harp, LF, Ye, Z, Ching, KC, Ching, CW, Antosiewicz, JE, Liu, H, Zhang, X, Green, RD, Stewart, R, Thomson, JA, Crawford, GE, Kellis, M and **Ren, B.** (2009) Global Chromatin Modifications at Enhancers Reflect Cell Type-Specific Gene Expression. Nature. 459(7243):108-12

35. Visel, A, Blow, MJ, Li, Z, Zhang, T, Akiyama, JA, Holt, A, Plajzer-Frick, I, Shoukry, M, Wright, C, Chen, F, Afzal, V, **Ren, B**, Rubin, EM, Pennacchio, LA. (2009) ChIP-seq Accurately Predicts Tissue-Specific Activity of Enhancers. Nature 457(7231): 854-8.

36. Won KJ, Agarwal S, Shen L, Shoemaker R, **Ren B**, Wang W. An integrated approach to identifying cis-regulatory modules in the human genome. (2009) PLoS ONE. 4(5): e5501.

37. RD Hawkins, GC. Hon, C Yang, JE. Antosiewicz-Bourget, LK. Lee, QM Ngo, KA Ching, LE Edsall, Z Ye, S Kuan, P Yu, H Liu, X Zhang, RD Green, VV Lobanenkov, R Stewart, JA Thomson, and **B Ren**, Chromatin States in Human ES Cells Reveal Key Regulatory Sequences and Genes Involved in Pluripotency and Self-renewal. Submitted

38. GC Hon, W Wang, and **B Ren**, Chromatin signatures mark exons for alternative splicing. Submitted

Patents

1. Wyrick, JJ,Young, RA, **Ren, B**, Robert, F. (2002) Chromosome-wide analysis of protein-DNA interactions. U.S. Patent # 6,410,243.
2. **Ren, B**, Hawkins, RD, Hon, GC, Heintzman, ND (2009) Enhancer signatures in the prognosis and diagnosis of cancers and other disorders. (pending)